



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,778	11/17/2003	Martin A. Allen	NOR-1118	2416
37172	7590	08/21/2006	EXAMINER	
WOOD, HERRON & EVANS, LLP (NORDSON) 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			DEL SOLE, JOSEPH S	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/714,778	ALLEN ET AL.	
	Examiner Joseph S. Del Sole	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 July 2006.
- 2a) This action is FINAL.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 10,11,22 and 23 is/are allowed.
- 6) Claim(s) 1-9, 12-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/2005.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 1-23 in the reply filed on 7/10/06 is acknowledged.

***Claim Objections***

2. Claims 7 and 19 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 7 and 19 include the same limitation, however they both lack a positive recitation of structure necessary to further limit their parent claims. Merely stating "cause the flow of air... to deviate in opposite... directions" provides no structure.

3. Applicant is advised that should claim 7 be found allowable, claim 19 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). The Examiner notes that both claim 7 and 19 are dependent on claim 1 and otherwise identical. The Examiner also notes that the preamble of claim 19 does not match the preamble of its parent claim 1. The Examiner suggests that the intended dependency of claim 19 is on claim 12 and such should be corrected.

4. Claims 6, 10, 17 and 22 are objected to because of the following informalities: **a)** claims 6 and 17, contain the phrase "are inclined symmetrical about" and the Examiner believes it should be changed to --are inclined symmetrically about --; **b)** in claims 10 and 22, "having a angle" should be changed to --having an angle--. Appropriate correction is required.

#### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-3, 6-14, 17-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 2, 2, 1, 5, 5, 5, 5, 6, 9, 7, 2, 9, 6, 6, 10, 10 and 10 respectively of copending Application No. 11/278,279. Although the conflicting claims are not identical, they are not patentably

distinct from each other because all currently claimed limitations are taught within the broad interpretation of the claims of 11/278,279.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 7, 9, 11, 19, 21 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 19 are vague and indefinite because it is unclear what is structurally recited.

Claims 9, 11, 21 and 23 are vague and indefinite because "systematically in a pattern" is unclear. One would not know what does or does not constitute a pattern.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a

patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 8-9 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Massey et al (3,274,644).

Massey et al teach a drawing device (Fig 1) for attenuating a plurality of filaments received from a spin pack of a meltspinning apparatus, comprising: at least one manifold including an inlet (Fig 4, at #24) receiving the plurality of filaments from the spin pack, an outlet (Fig 4, bottom) and a slotted passageway extending therebetween, said at least one manifold having a slot from which a high-velocity flow of air in the passageway effective to attenuate the filaments (Figs 1 and 4), the filaments and the flow of air being discharged from said outlet in a discharge direction; a plurality of guides (Figs 3 and 4, at #16) aligned in a row proximate to said outlet, said plurality of guides each inclined (Fig 4) for causing the flow of air and the filaments to deviate from said discharge direction, said plurality of guides having a progressively varying angle relative to said discharge direction (Fig 4); the progressively varying angle varies systematically in a pattern (the adjustability of such makes such capable of this); a spunbonding apparatus for depositing filaments on a collector to form a nonwoven web, comprising: a spin pack capable of forming filaments from a thermoplastic material; a drawing device having an inlet aligned for receiving the filaments from said spin pack, an outlet and a slotted passageway extending from the inlet to the outlet, said filament

drawing device applying a high-velocity flow of air in the passageway between said inlet and said outlet effective to attenuate the filaments, the filaments and air being discharged from said outlet in a discharge direction; and a plurality of guides aligned in a row proximate to said outlet, said plurality of guides each inclined for causing the flow of air and the filaments to deviate from said discharge direction, said plurality of guides having a progressively varying angle relative to said discharge direction (Figs 1, 3 and 4); the progressively varying angle varies systematically in a pattern.

11. Claims 1-7 and 12-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Haynes et al (6,709,623).

Haynes et al teach a drawing device for attenuating a plurality of filaments received from a spin pack of a meltspinning apparatus, comprising: at least one manifold (Fig 1); including an inlet receiving the plurality of filaments from the spin pack, an outlet and a slotted passageway extending therebetween, said at least one manifold having a slot from which a high-velocity flow of air in the passageway effective to attenuate the filaments, the filaments and the flow of air being discharged from said outlet in a discharge direction; a first plurality of guides (Fig 3, #303) positioned proximate to said outlet and aligned in a first row, each of said first plurality of guides inclined at a first angle relative to said discharge direction; and a second plurality of guides (Fig 3, #301) positioned proximate to the outlet of the filament drawing device and aligned in a second row, each of said second plurality of guides positioned between an adjacent pair of said first plurality of guides, and each of said second plurality of guides inclined at a second angle relative to said discharge direction, wherein said first

plurality of guides and said second plurality of guides cause the flow of air and the filaments to deviate from said discharge direction; a plurality of connecting surfaces each extending between one of said first plurality of guides and one of said second plurality of guides to eliminate open spaces therebetween (Fig 3, the Examiner notes that these guides are connected, such connection reads on the claimed connecting surfaces); wherein said first angle is equal to said second angle and both are in the range of 3 to 30 degrees (Fig 3); first plurality of guides and said second plurality of guides are inclined symmetrical about a plane containing said discharge direction so that said first angle is equal and opposite to said second angle (Fig 3, the Examiner notes that this is true since the two sets of guides form a right angle with one another); the first plurality of guides and said second plurality of guide cause the flow of air and the filaments to deviate in opposite upstream and downstream directions relative to said discharge direction; the apparatus is a a spunbonding apparatus (Fig 1)for depositing filaments on a collector (Fig 1, #26) to form a nonwoven web. the first plurality of guides and said second plurality of guides are faceted (Fig 3); the first plurality of guides and said second plurality of guide cause the flow of air and the filaments to deviate in opposite upstream and downstream directions relative to said discharge direction.

***References of Interest***

12. Shono et al (4,159,200), Massey et al (3,274,644), Boney et al (6,989,125), Milligan et al (6,244,845), Milligan (6,247,911) and Page (3,981,650) are cited of interest to show the state of the art.

***Allowable Subject Matter***

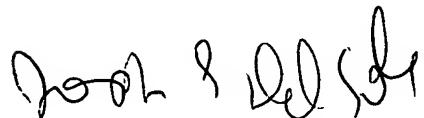
13. Claims 10-11 and 22-23 are allowed.

14. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach a plurality of guides having an angle relative to the discharge direction that progressively varies across a width of an outlet, the guides aligned in a row proximate to the outlet of a drawing device (manifold) that receives filaments from a spin pack; the drawing device (manifold) adapted to apply a high-velocity flow of air within a slotted passageway of the drawing device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on M-F 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph S. Del Sole